

## **Failure of CO<sub>2</sub> Aluminium Cylinders Update**

This document is to provide an update regarding the program launched by Tyco Fire Protection Products (Tyco) in May 2011 to address CO<sub>2</sub> aluminum cylinders manufactured by FLN. Tyco has completed an extensive investigation into the cause of the failure in order to ensure confidence of our product and address concerns in the market.

### **Origin of the Failure**

The failure of the valves was the result of stress corrosion cracking (SCC). The stress involved was a combination of the manufacturing of the valve and the torque used to assemble the valve to the cylinder. The corrodent involved is believed to be excessive moisture in the cylinder.

### **Field Observations**

Tyco has observed a failure rate of 0.001% attributable to the above conditions.

### **Solution**

Tyco has re-examined its manufacturing process, valve suppliers, and CO<sub>2</sub> suppliers to ensure that none of these can cause similar failures.

Tyco is engaged in an aggressive replacement effort that began in May 2011 to replace extinguishers that may be subject stress corrosion cracking.

Reminder letters are being generated to those distributors that have may have purchased affected extinguishers to ensure they are taking the appropriate actions in the market to identify and remove these extinguishers.

Tyco welcomes the support of the Fire Industry Association in proactively bringing details of this program to the attention of users. An information sheet setting out how affected extinguishers can be identified is attached.

### **Assistance**

Tyco has established a dedicated full time proactive help desk and project manager plus a temporary team of customer service engineers that have been appointed to the program for a six month period to conduct customer visits, give general guidance and perform the replacement if required.

The customer service team has made efforts to contact by telephone and email each service provider that is believed to have purchased the affected units. The customer service team has also been actively supporting and providing assistance to end users that have no service provider assistance.

Please contact our help desk on 0161 875 0444 or email [co2uk.replacement@tycofp.com](mailto:co2uk.replacement@tycofp.com) if you need assistance.

